RCA

6J6

MEDIUM-MU TWIN TRIODE

MINIATURE TYPE

GENERAL DATA

Electrical:

Heater for Unipotential Cathode:

Voltage	6.3	ac or dc volts
Current	0.45	amp

Direct Interelectrode Capacitances:

	Without External Shield	*With External Shield*°	
Unit No. 1			
Grid to plate	1.6	1.5	μμf
Grid to cathode and heater	2.2	2.6	μμf
Plate to cathode and heater	0.4	1.6	μμf
Unit No. 2			
Grid to plate	1.6	1.5	μμf
Grid to cathode and heater	2.2	2.6	μμf
Plate to cathode and heater	0.4	1.0	μμf

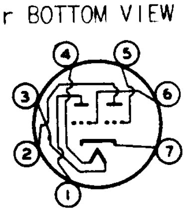
Characteristics, Class A_1 Amplifier (Each Unit):

Plate Voltage	100	volts
Cathode-Bias Resistor■	50♦	ohms
Amplification Factor	38	
Plate Resistance	7100	ohms
Transconductance	5300	μmhos
Plate Current	8.5	ma

Mechanical:

Mounting Position	Any
Maximum Overall Length	2-1/8"
Maximum Seated Length	1-7/8"
Length, Base Seat to Bulb Top (Excluding tip)	1-1-2" ± 3/32"
Maximum Diameter	3/4"
Bulb	T-5-1/2
Base	Small-Button Miniature 7-Pin (JETEC No.E7-1)
Basing Designation for BOTTOM VIEW	7BF

Pin 1 - Plate of Unit No.2
Pin 2 - Plate of Unit No.1
Pin 3 - Heater
Pin 4 - Heater



Pin 5 - Grid of Unit No.1
Pin 6 - Grid of Unit No.2
Pin 7 - Cathode

° With external shield JETEC No.316 connected to cathode.
■ Fixed-bias operation is not recommended.
♦ Value is for both units operating at the specified conditions.

← Indicates a change.

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MEDIUM-MU TWIN TRIODE

AMPLIFIER - Class A_1

Values are for Each Unit

Maximum Ratings, *Design-Center Values*:

PLATE VOLTAGE	300 max.	volts
GRID VOLTAGE:		
Positive bias value	0 max.	volts
PLATE DISSIPATION	1.5 max.	watts
→ PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode	100 max.	volts
Heater positive with respect to cathode	100 max.	volts

Maximum Circuit Values (For maximum rated conditions):

Grid-Circuit Resistance:		
For cathode-bias operation	0.5 max.	megohm

RF POWER AMPLIFIER & OSCILLATOR - Class C Telegraphy

Key-down conditions per tube without modulation

Values are for Each Unit

Maximum Ratings, *Design-Center Values*:

DC PLATE VOLTAGE	300 max.	volts
DC GRID VOLTAGE:		
Negative bias value	-40 max.	volts
→ Positive bias value	0 max.	volts
DC PLATE CURRENT	15 max.	ma
DC GRID CURRENT	8 max.	ma
DC PLATE INPUT	4.5 max.	watts
PLATE DISSIPATION	1.5 max.	watts
→ PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode	100 max.	volts
Heater positive with respect to cathode	100 max.	volts

Typical Push-Pull Operation at Frequencies up to 50 Mc:●

Values are for Both Units

DC Plate Voltage	150	volts
DC Grid Voltage:		
From a fixed supply of	-10	volts
From a grid resistor of	625	ohms
From a cathode resistor of	220	ohms
DC Plate Current	30	ma
DC Grid Current (Approx.)*	16	ma
Driving Power (Approx.)*	0.35	watt
Useful Power Output (Approx.)	3.5	watts

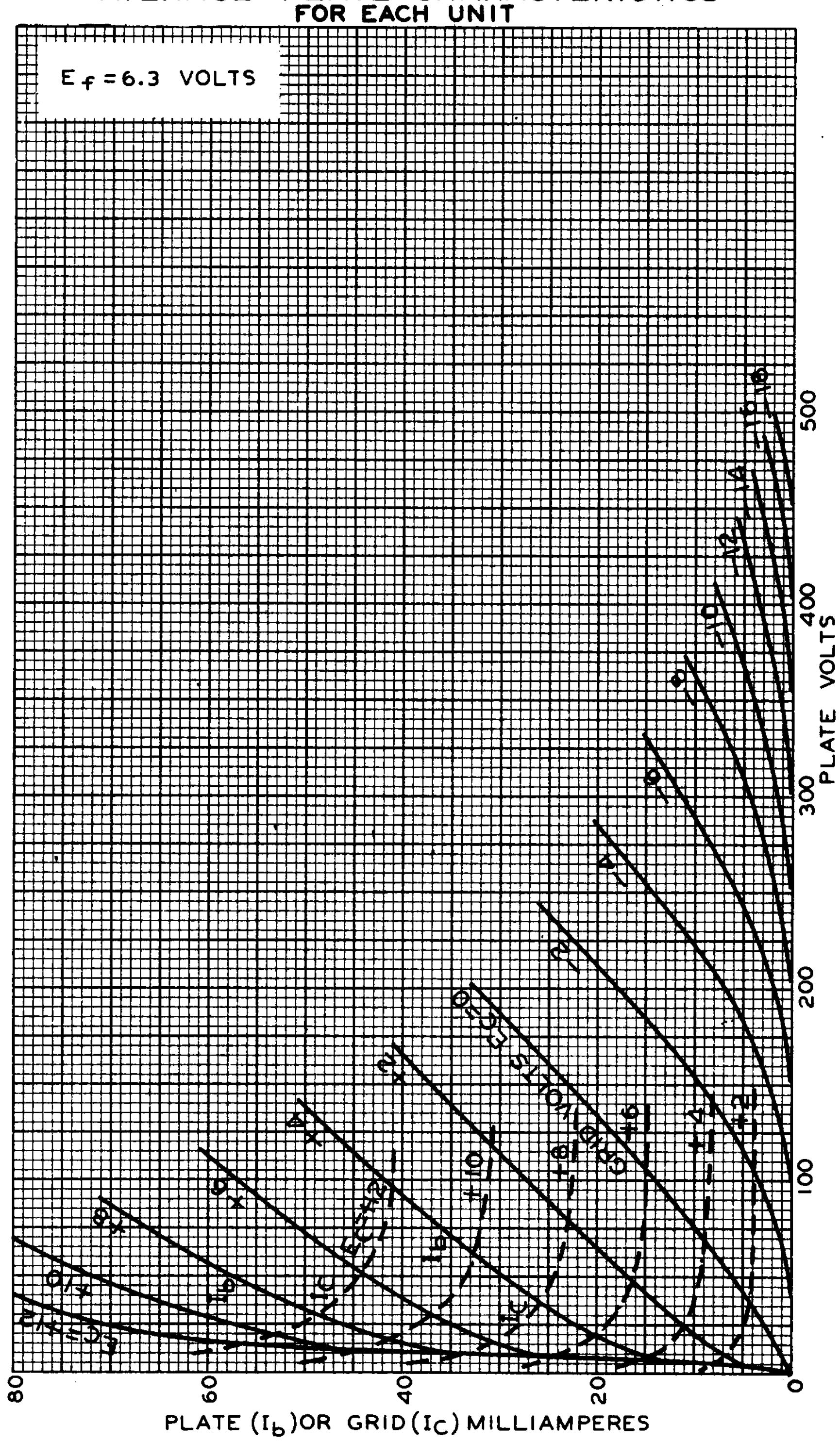
● Approximately 1.0 watt can be obtained when the 6J6 is used at 250 Mc as a push-pull oscillator with a plate voltage of 150 volts, with maximum rated plate dissipation, and with a grid resistor of 2000 ohms common to both units.

* For effect of load resistance on grid current and driving power, refer to *TUBE RATINGS-Grid Current and Driving Power* in the *General Section*.

→ Indicates a change.

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AVERAGE PLATE CHARACTERISTICS
FOR EACH UNIT

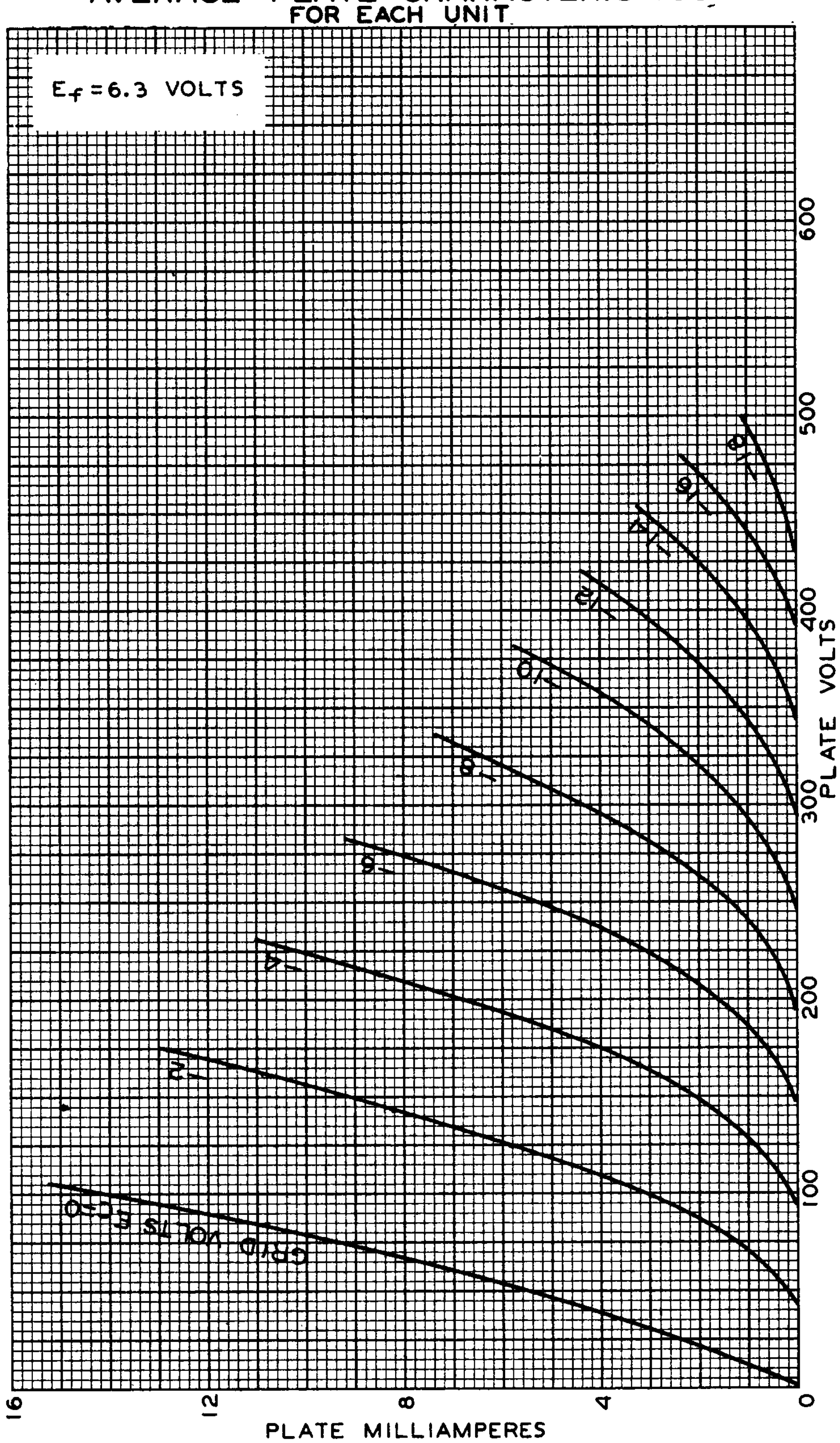


OCT. 21, 1944 — RCA VICTOR DIVISION — 92CM—6403R1

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

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AVERAGE PLATE CHARACTERISTICS
FOR EACH UNIT

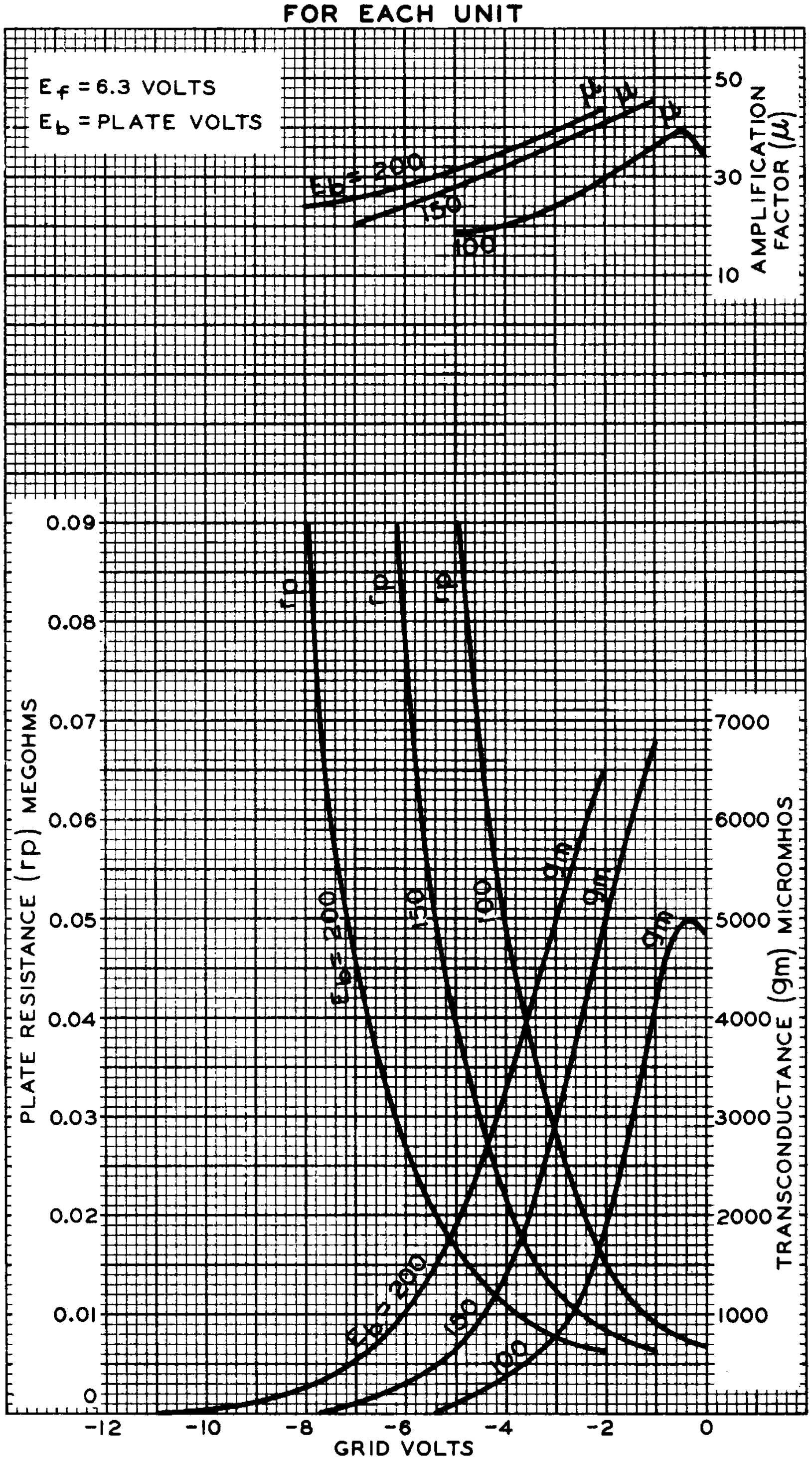


SEPT. 20, 1944

RCA VICTOR DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-6402R1

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AVERAGE CHARACTERISTICS
FOR EACH UNIT



RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY